DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018599
Date Inspected: 10-Dec-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 900
OSM Departure Time: 1730
Location: Job Site

CWI Name: William Sherwood

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Orthotropic Box Girder

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

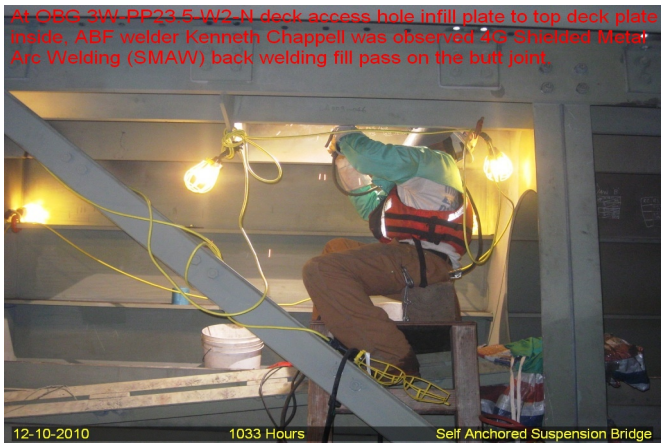
At OBG 3W-PP19.5-W5-S access hole infill plate to top deck plate outside, QA randomly observed ABF/JV qualified welder Mick Chan perform Complete Joint Penetration (CJP) groove fill pass welding. The welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8” diameter E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-1010 Revision 1. The joint being welded has a double V-groove butt joint. ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters of the welder. At the end of the shift, fill pass welding of the butt joint at location mentioned above was still continuing and should remain tomorrow.

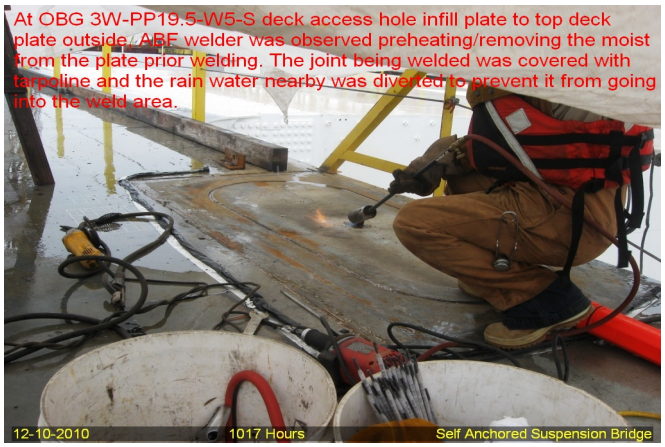
At OBG 3W-PP23.5-W2-N deck access hole inside, QA randomly observed ABF/JV qualified welder Kenneth Chappell continuing to perform fill pass back welding on the CJP butt joint. The welder was observed manually welding in the 4G (overhead) position utilizing a SMAW with 1/8” diameter E7018H4R electrode and implementing Caltrans approved WPS ABF-WPS-D15-1010 Revision 1. The joint being welded has a double V-groove butt joint welded with open root from the top deck. ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters of the welder. At the end of the shift, SMAW fill pass welding was still continuing and should remain tomorrow.

At OBG 4W-PP24.5-W5-S deck access hole inside, QA randomly observed ABF/JV qualified welder Han Wen

Yu continuing to perform fill pass back welding on the CJP butt joint. The welder was observed manually welding in the 4G (overhead) position utilizing a SMAW with 1/8” diameter E7018H4R electrode and implementing Caltrans approved WPS ABF-WPS-D15-1010 Revision 1. The joint being welded has a double V-groove butt joint welded with open root from the top deck. ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters of the welder. At the end of the shift, SMAW fill pass welding was still ongoing and should continue tomorrow.

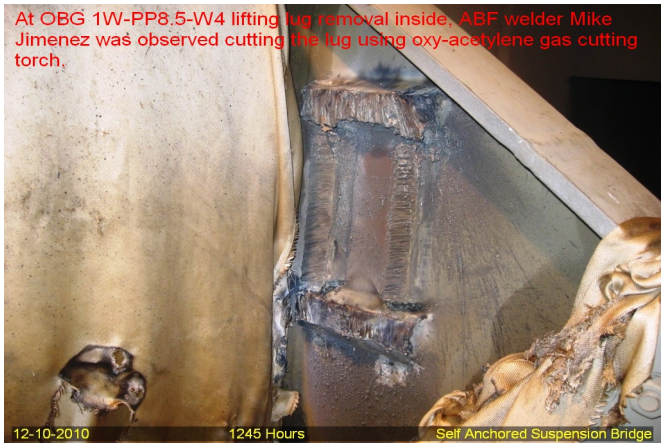
At OBG 6W-PP46.5-W5-S access hole infill plate to top deck plate outside, QA randomly observed ABF/JV qualified welder Jorge Lopez continuing to perform CJP groove fill pass to cover pass welding. The welder was observed welding in the 1G (flat) position utilizing SMAW with 1/8” diameter E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-1010 Revision 1. The joint being welded has a double V-groove butt joint. ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters of the welder. At the end of the shift, cover pass welding of the butt joint at location mentioned above was still continuing and should remain tomorrow.





Summary of Conversations:

At OBG 1W-PP8.5-W4 inside, QA randomly observed lifting lug bracket removal per Request For Information (RFI) ABF-RFI-001151R01. During the observation, it was noted that the lifting lugs were removed using the oxy-acetylene gas torch and the remnants of it were cut further using carbon air arc gouging (up to ¼” left after cutting). Even after grinding, remnants were still noted with square cut and not smoothly ground. There was no 1:3 transition on the cut corners as required in the submitted/approved RFI. After grinding, the lifting lug removal was painted using the Aervoe zinc rich galvanizing spray which the ABF foreman Rick Clayborn said was just temporary. It was noted that the lifting lug removal was not done per RFI ABF-RFI-001151R01. When QC was asked concerning this lug removal, Bonifacio Daquinag informed this QA that they never got involved with it due to lack of information (QC were not told about the work and not received the RFI). At the moment, all four lifting lugs at the eastbound were already cut and painted while two were cut but only one was painted at the westbound. Two more lifting lugs at the westbound need to cut.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer